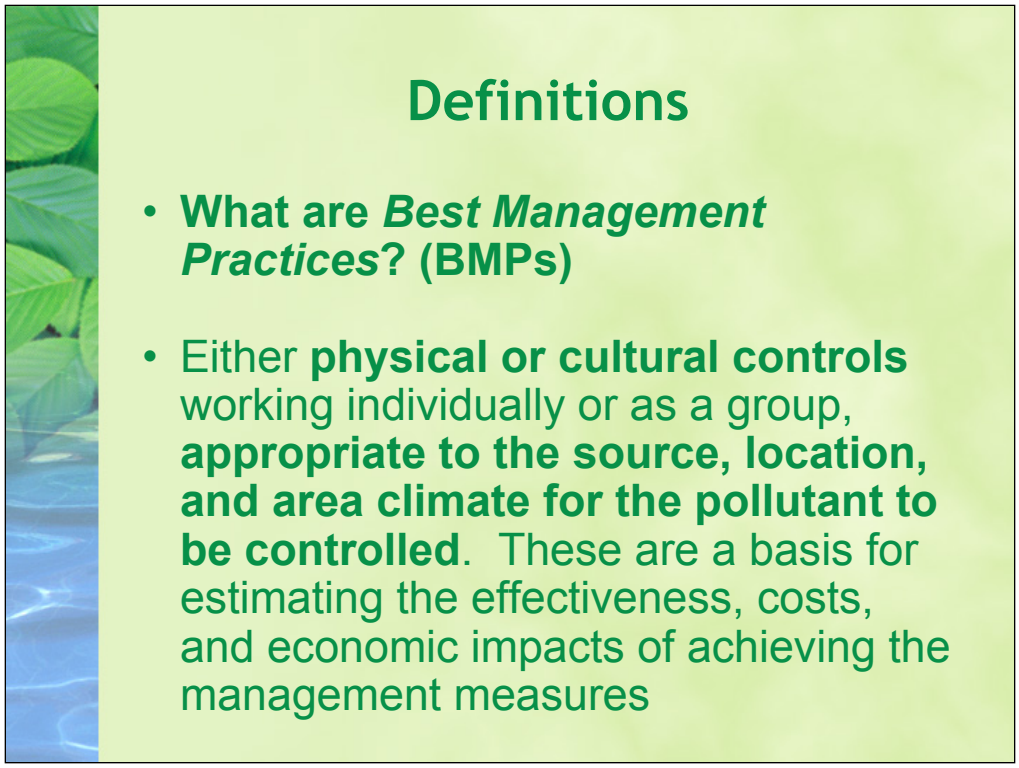
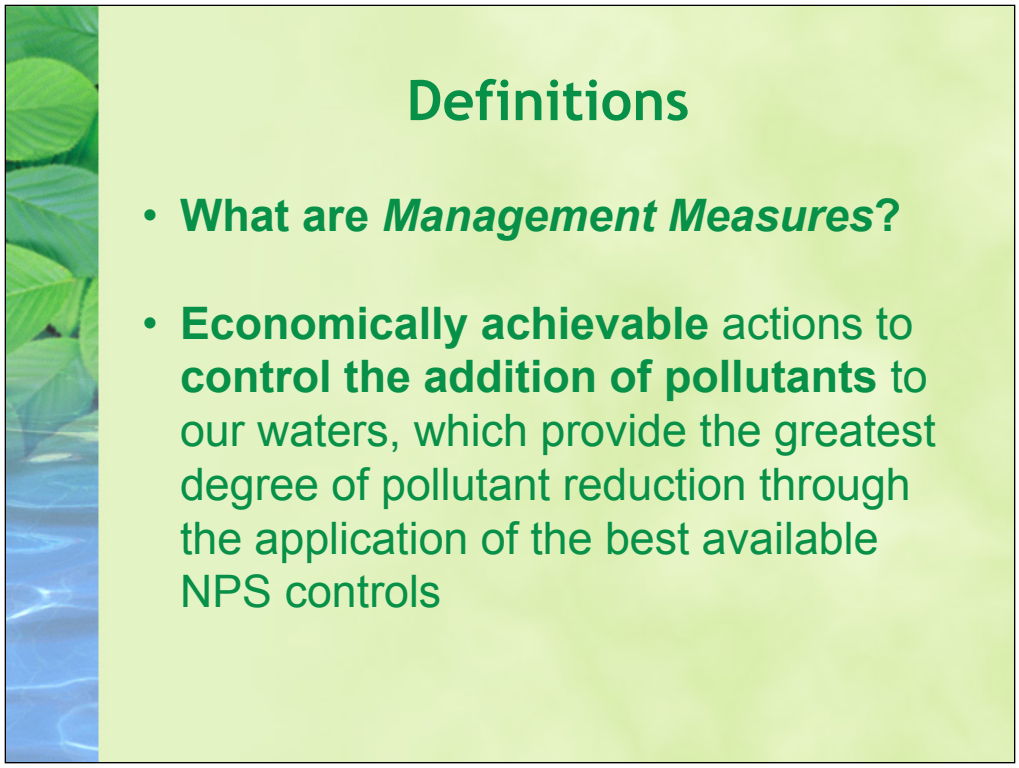
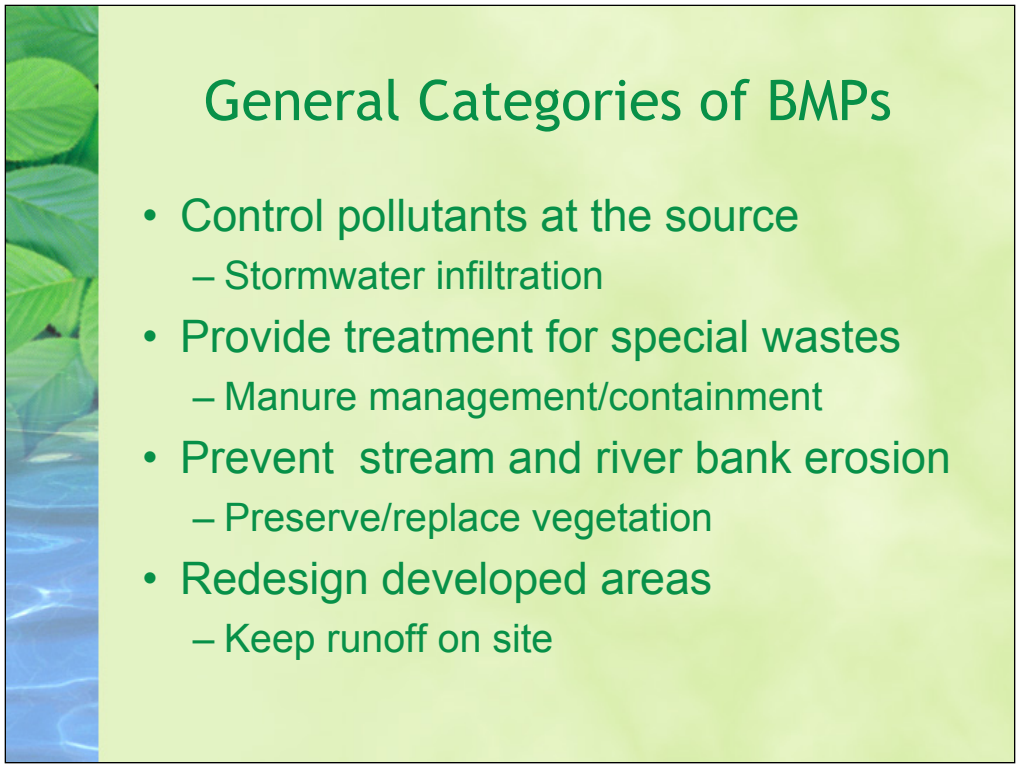
Let's discuss the role of best management practices an different approaches to management measures. These are things you can do even if you have not formally adopted a NPS program, but know that nonpoint source pollution is effecting your waterbodies



Let's begin with definitions. These are place specific so you have to understand the local conditions and area context.



These are broader groups of actions that are grouped around specific categories of NPS

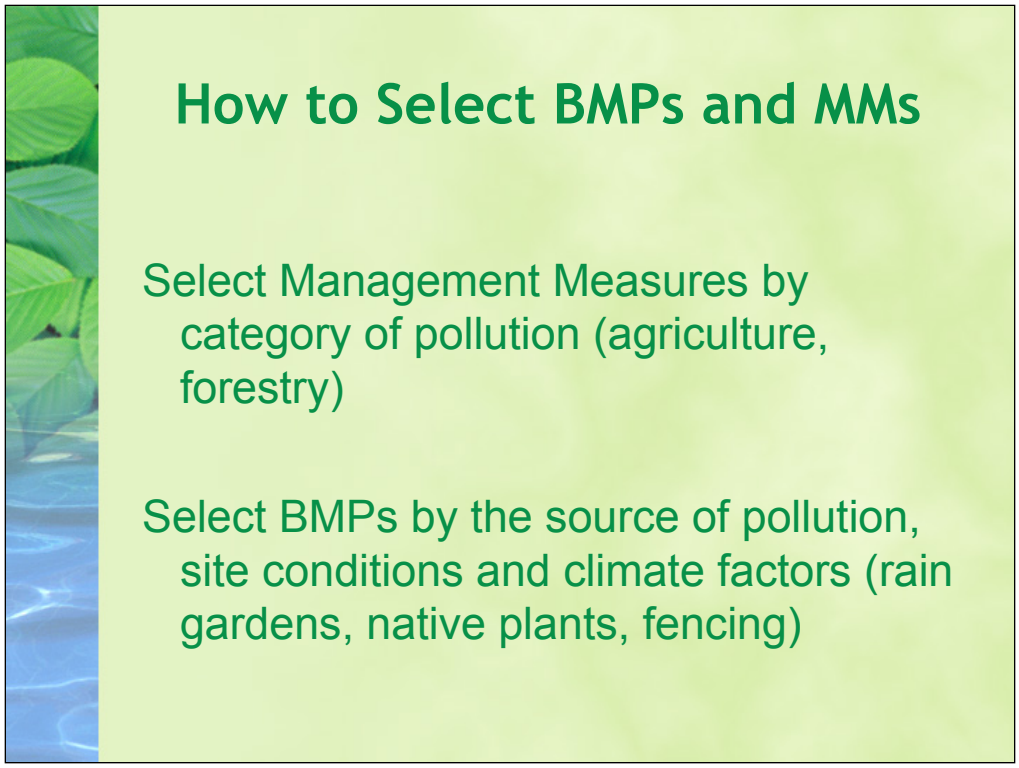


These are kinds of categories that get you thinking about how generally you may want to approach the NPS

Problem

Generally you are looking to reduce volume, reduce concentration, and stabilize waterways

before you begin to look for BMPs, you should have a good understanding of the water quality goals you want to achieve
It will be landscape specific and related usually to water quality assessments

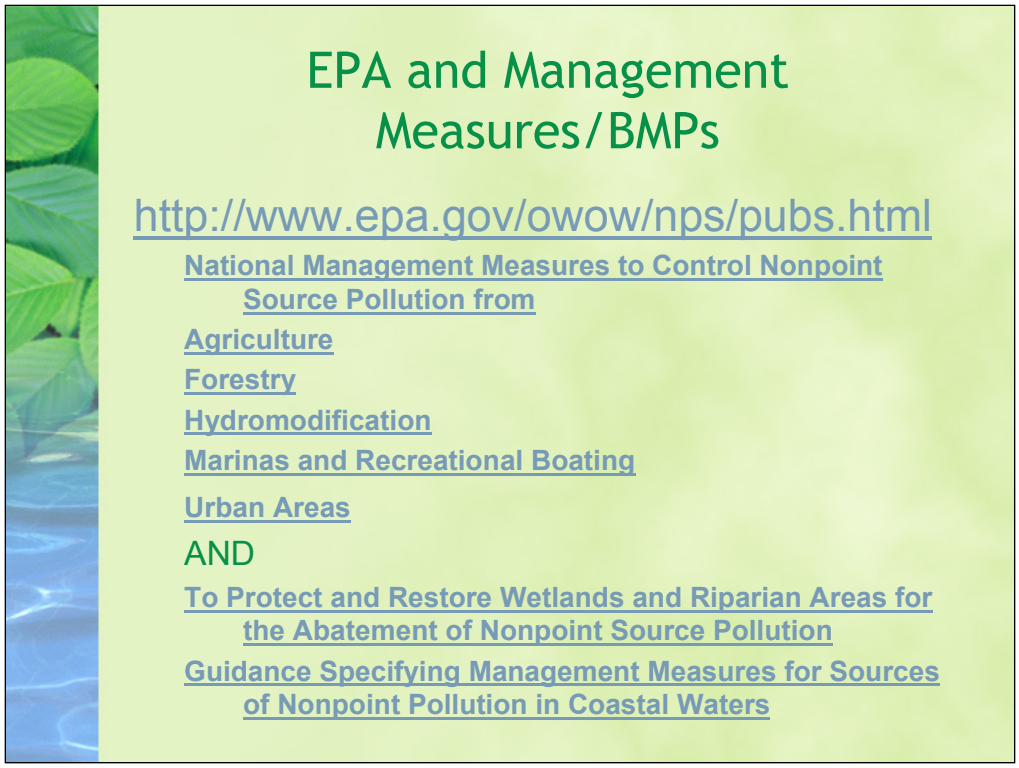


BMPs usually are described as the physical action taken at a place to control NPS, but can include other community based or human focused actions

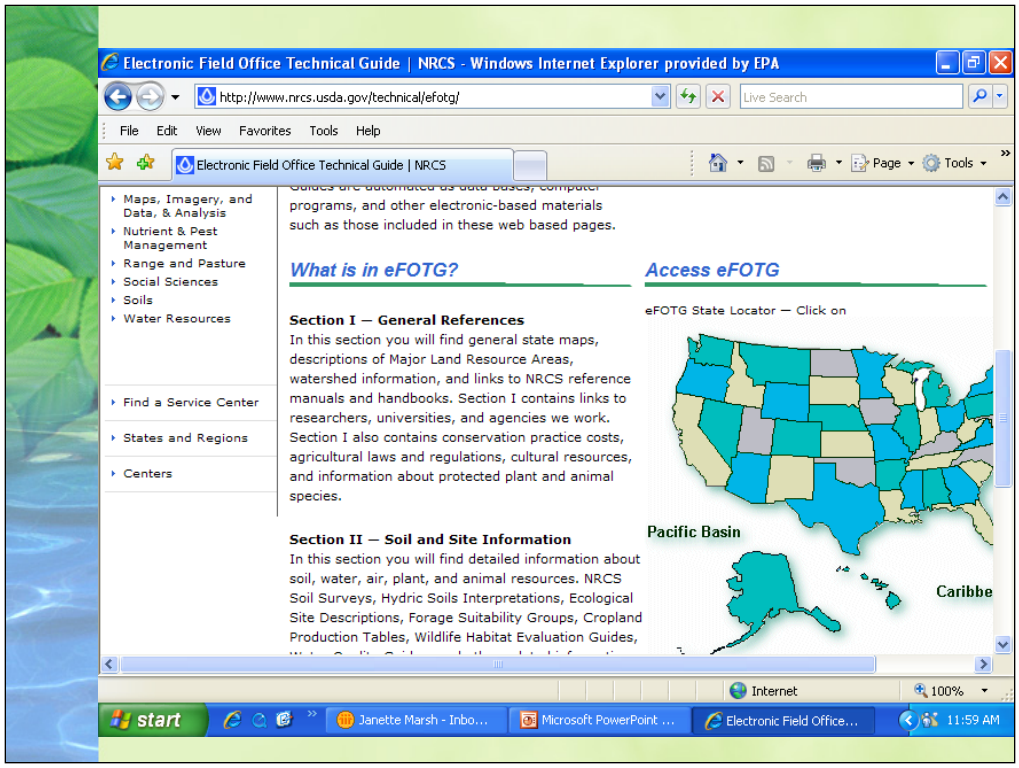
Management measures are developed around the categories and subcategories of NPS

What it takes to get a BMP implemented

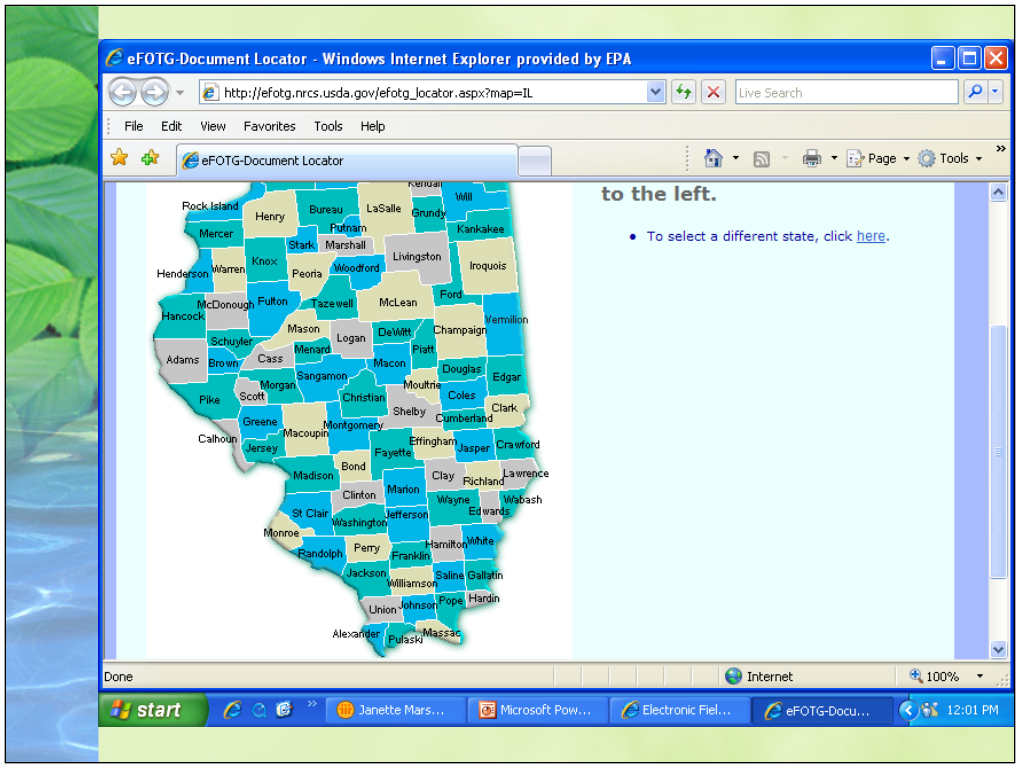
- Technical information
  what is the problem you are trying to solve
- Partnerships – look at what is being used in your area
- Clear understanding of the outcome desired



EPA has many resources that are on the web – there now is a watershed central portal, but this site (nps) is full of good focused information and reflects EPA's general categories of concern



Probably the best reference for specific BMPs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McDonough
Fulton
Tazewell
McLean
Ford
Hancock
Mason
Logan
DeWitt
Champaign
Vermilion
Schuyler
Menard
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Coles
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Jasper
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Jersey
Fayette
Bond
Madison
Clay
Richland
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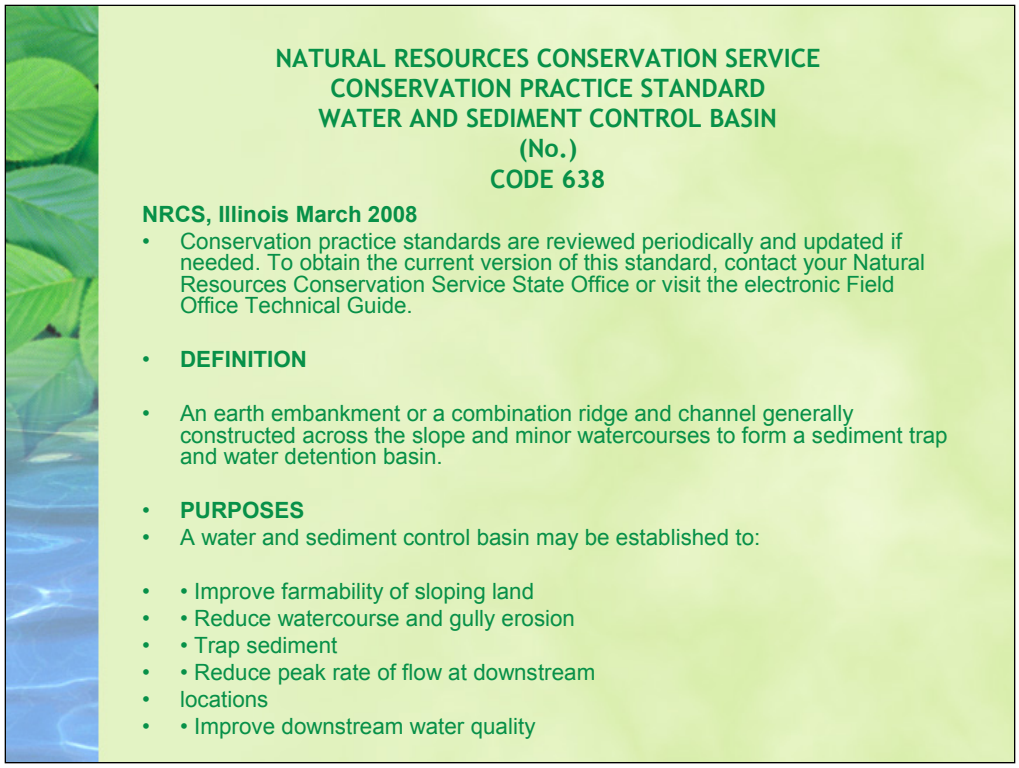
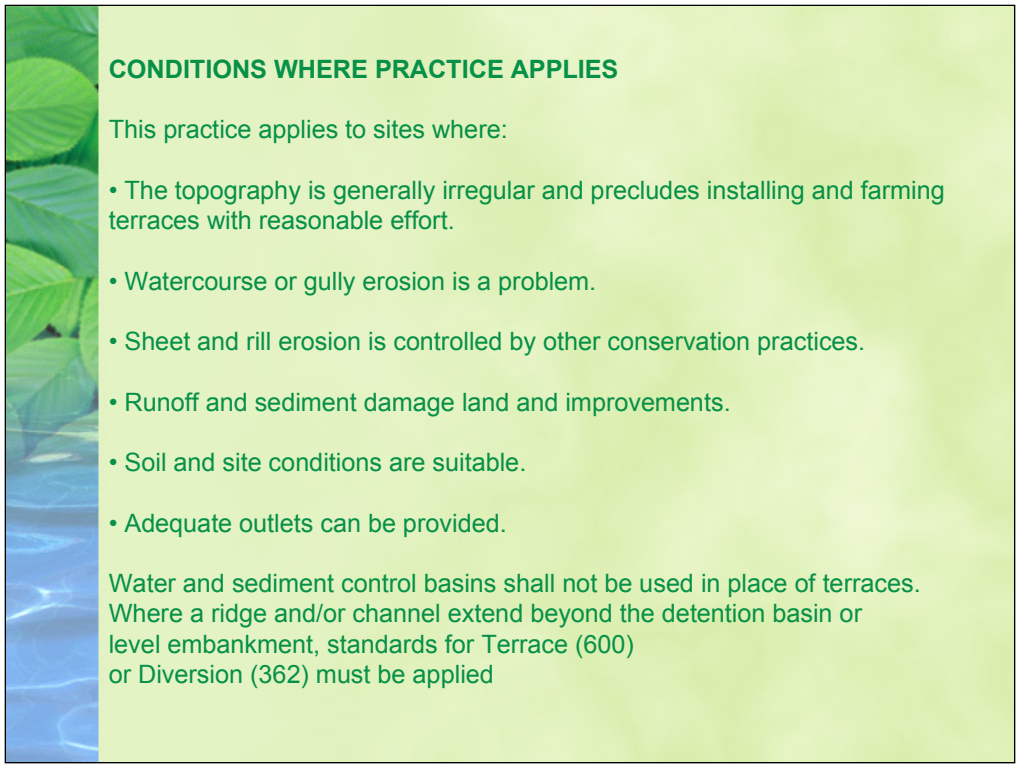


An actual practice entry

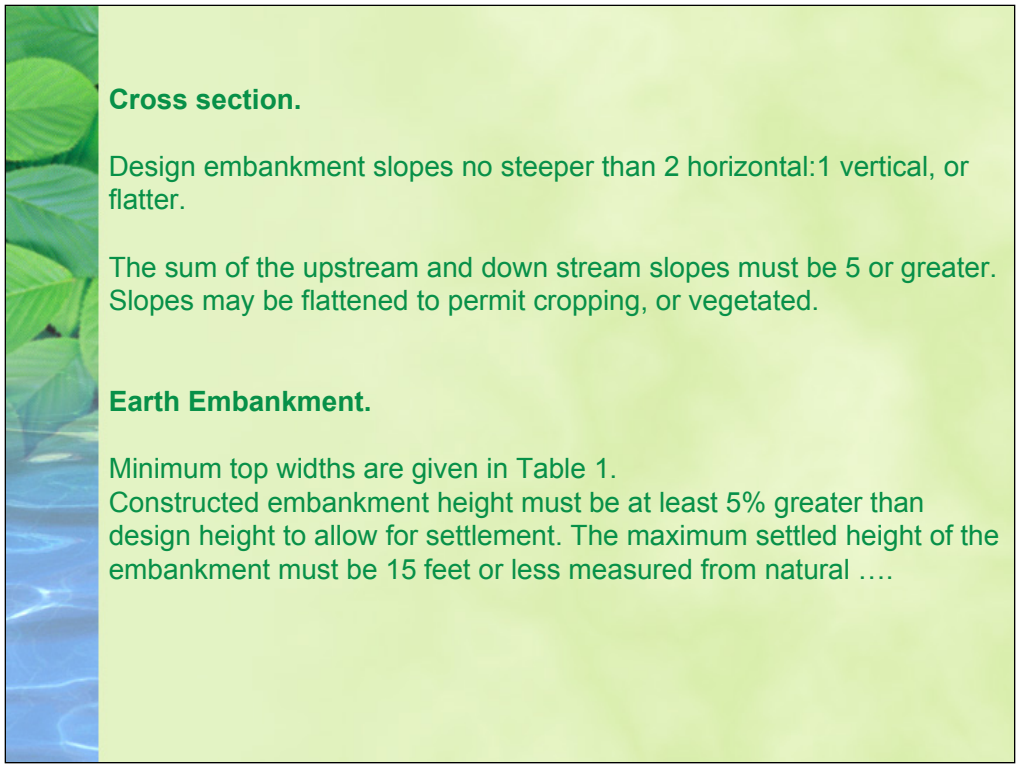


CONDITIONS WHERE PRACTICE APPLIES

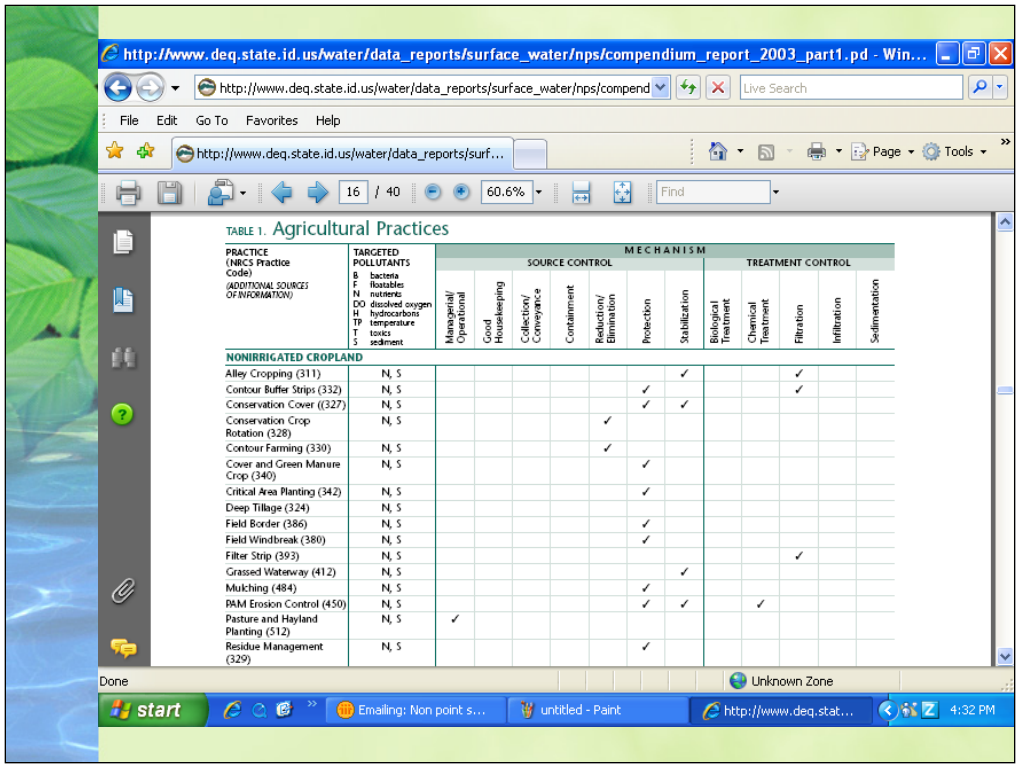
This practice applies to sites where:

- The topography is generally irregular and precludes installing and farming terraces with reasonable effort.
- Watercourse or gully erosion is a problem.
- Sheet and rill erosion is controlled by other conservation practices.
- Runoff and sediment damage land and improvements.
- Soil and site conditions are suitable.
- Adequate outlets can be provided.

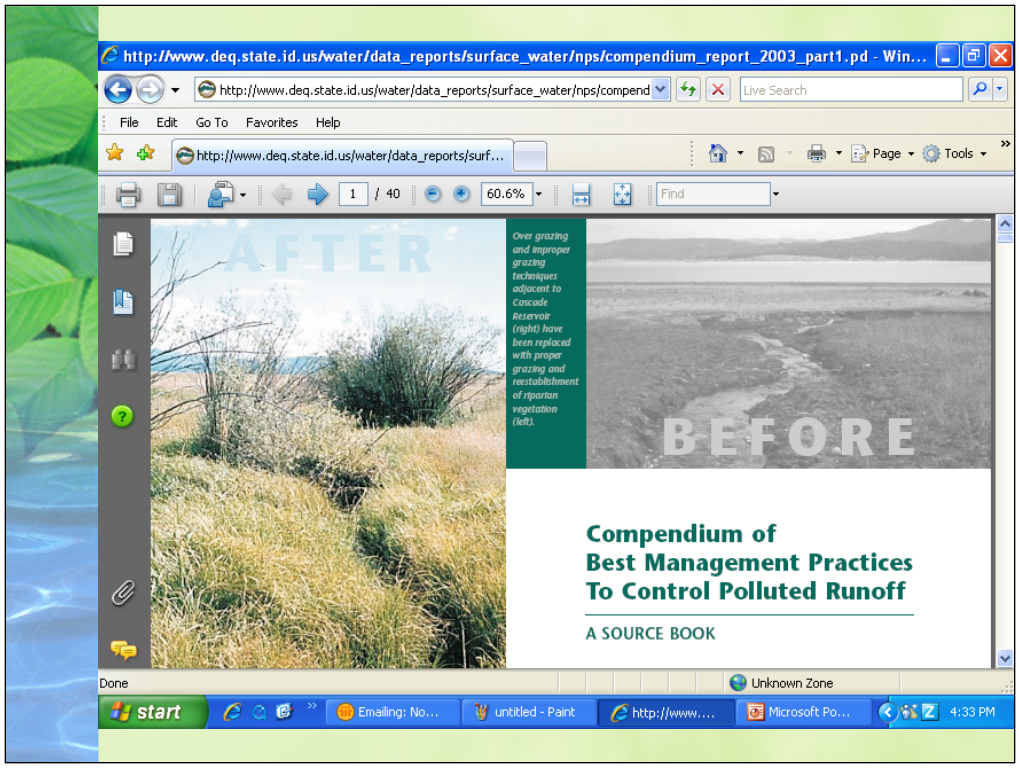
Water and sediment control basins shall not be used in place of terraces. Where a ridge and/or channel extend beyond the detention basin or level embankment, standards for Terrace (600) or Diversion (362) must be applied



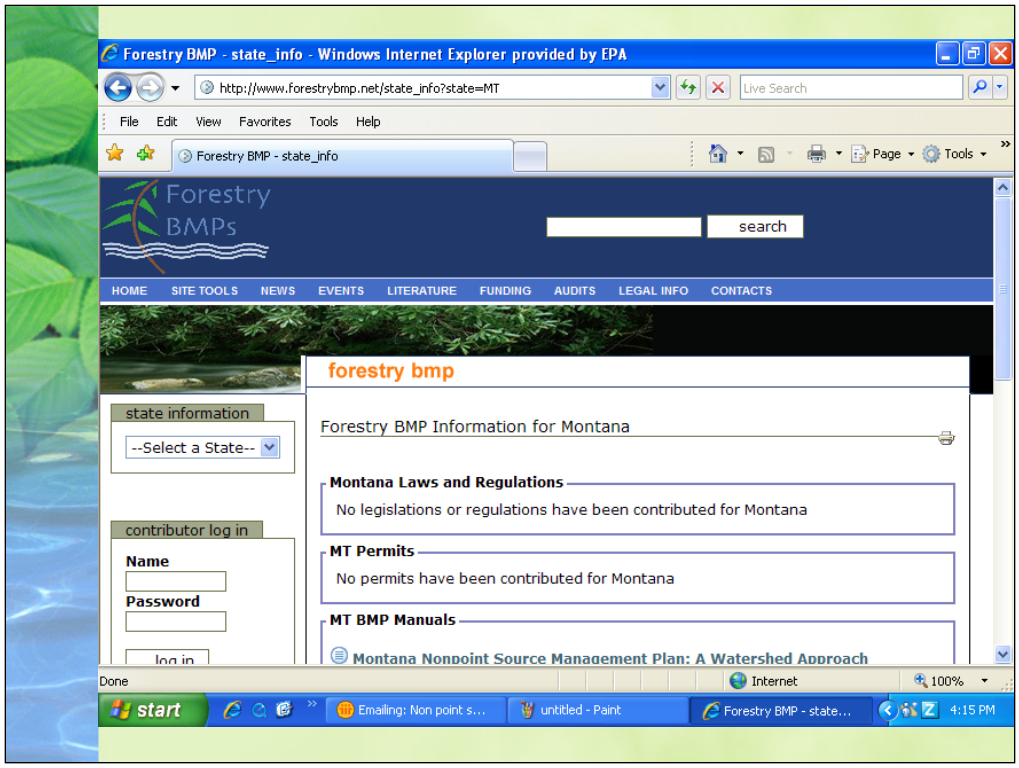
Even more detail



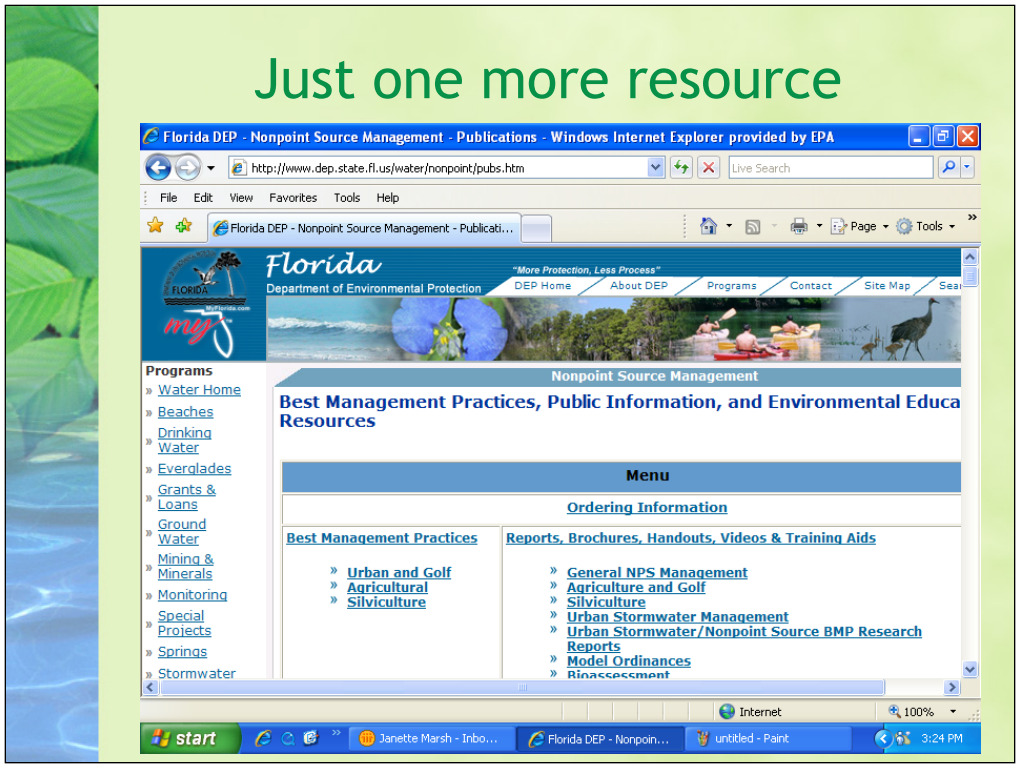
Now we can look at some State examples and resources – this is from Idaho Department of Environmental Quality



More from Idaho



An Not for Profit site with state selection tool forestrybmp.net



Florida Department of Environmental Protection

Types of BMPs

- Structural
  - Moving earth
  - Planting things
  - Construction
- Non-structural
  - Institutional changes
  - Ordinance development
  - Residue management

Grand Portage Site 1 Upstream. November 1, 2007 looking downstream. Site 1 Upstream. June 28, 2009 looking downstream. Grand Portage is at the very tip of the arrowhead in MN, a 56,000 acre reservation almost 100 miles of perennial and intermittant streams, 816 acres of lakes and more than 7,000 acres of wetlands

Gravel Pit

More Grand Portage August 2007 and June 2009

2007 to 2009

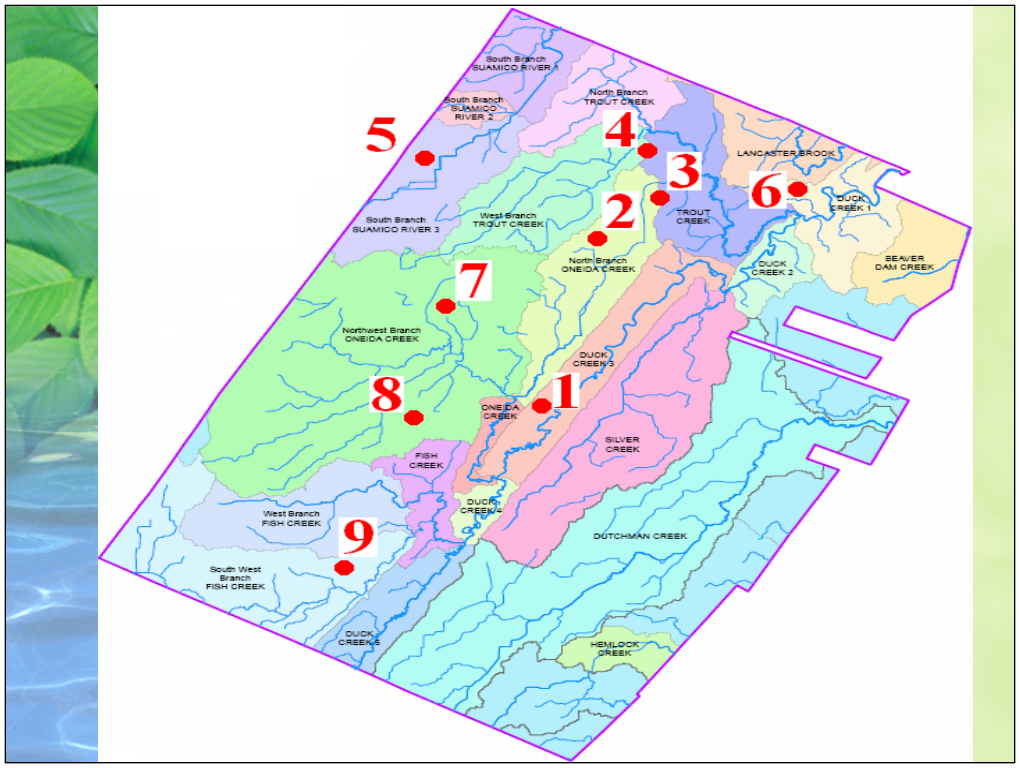
More BMPs

Residue management and field borders and vegetative filterstrips

Structural BMPs

Sediment retention pond and cattle crossing – cattle will still be interested in the water – alternative watering sites are needed

Before and After and urban example

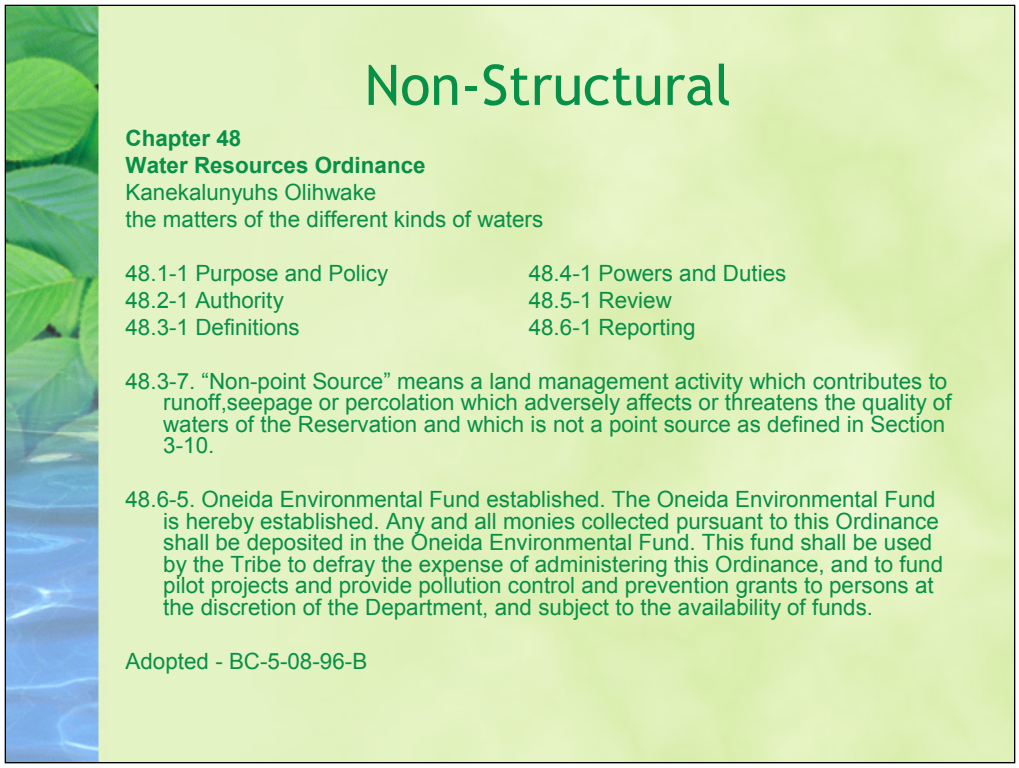


Onedia buffer strips – note many in headwaters areas – generally 35 foot wide used timothy red clover and brome mix

The Oneida have a 65,000 acre reservation just outside of Green Bay Wisconsin, making them part of an MS 4 area for stormwater permits. They have 233 miles of rivers, creeks and streams, 112 acres of lakes and ponds and 1,453 acres of wetlands

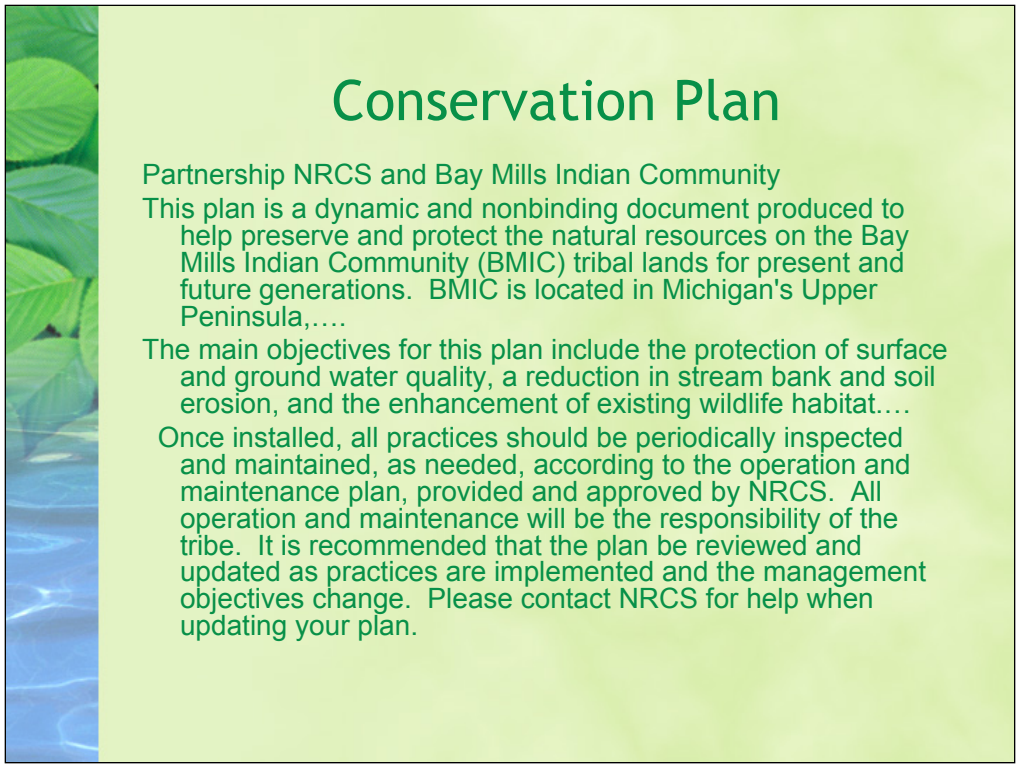
Both Oneida and Grand Portage drain to the Great Lakes.

A way to deal with rain on the parking lot



Non Structural/ institutional Oneida

Oneida have worked with many partners since the 1980’s on water resource issues.



Bay Mills in 2008 worked with NRCS on a conservation plan, located in the eastern part of Michigan's Upper Peninsula and have a reservation of 3,225 acres, 72.5 acres of lakes

5 miles of streams and 1, 085 acres of wetlands

They also structures an accord on water resources issues with the state of Michigan in 2004


13th Annual
LAKESFEST
June 20, 2009
Downtown Lac du Flambeau
Saturday, 10a.m. to 3p.m.
"Water is life within the sacred circle."
Educational Displays
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Live Entertainment
Canoe Races with prizes.
Raffles
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• Two tickets and two-night hotel stay for Green Bay Packers Season Opener vs. Chicago Bears.
• Patio Set with Grill.
• Plus hourly raffles.
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The Lac du Flambeau Chamber at 715-588-3346
LDF Tribal Natural Resources Department at 715-588-4213
Bryan Hoover at 715-588-7214 or E-mail: lakesfest@yahoo.com


Thank you
QUESTIONS?
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State and Tribal Nonpoint Source
Technical Contact
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312 - 886 - 4856